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RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/086,181DATE: 03/14/2002
TIME: 12:17:40Input Set : A:\Seqlist.txt
Output Set: N:\CRF3\03142002\J086181.raw

4 <110> APPLICANT: GIMENO, Ruth
 6 <120> TITLE OF INVENTION: METHODS FOR THE TREATMENT OF METABOLIC
 7 DISORDERS, INCLUDING OBESITY AND DIABETES
 9 <130> FILE REFERENCE: MNI-220
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/086,181
 C--> 11 <141> CURRENT FILING DATE: 2002-02-26
 11 <150> PRIOR APPLICATION NUMBER: 60/271,655
 12 <151> PRIOR FILING DATE: 2001-02-26
 14 <160> NUMBER OF SEQ ID NOS: 16
 16 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 18 <210> SEQ ID NO: 1
 19 <211> LENGTH: 1743
 20 <212> TYPE: DNA
 21 <213> ORGANISM: Homo sapiens
 23 <220> FEATURE:
 24 <221> NAME/KEY: CDS
 25 <222> LOCATION: (44)...(1129)
 27 <400> SEQUENCE: 1
 28 tccggactag ttctagaccg ctgcgggccc gcaaggcgccg gga atg tcc cct gaa 55
 29 Met Ser Pro Glu
 30 1
 32 tgc gcg cgg gca gcg ggc gac gcg ccc ttg cgc agc ctg gag caa gcc 103
 33 Cys Ala Arg Ala Ala Gly Asp Ala Pro Leu Arg Ser Leu Glu Gln Ala
 34 5 10 15 20
 36 aac cgc acc cgc ttt ccc ttc ttc tcc gac gtc aag ggc gac cac cgg 151
 37 Asn Arg Thr Arg Phe Pro Phe Ser Asp Val Lys Gly Asp His Arg
 38 25 30 35
 40 ctg gtg ctg gcc gcg gtg gag aca acc gtg ctg gtg ctc atc ttt gca 199
 41 Leu Val Leu Ala Val Glu Thr Thr Val Leu Val Leu Ile Phe Ala
 42 40 45 50
 44 gtg tcg ctg ctg ggc aac gtg tgc gcc ctg gtg ctg gtc cgc cga 247
 45 Val Ser Leu Leu Gly Asn Val Cys Ala Leu Val Leu Val Ala Arg Arg
 46 55 60 65
 48 cga cgc cgc ggc gcg act gcc tgc ctg gta ctc aac ctc ttc tgc gcg 295
 49 Arg Arg Arg Gly Ala Thr Ala Cys Leu Val Leu Asn Leu Phe Cys Ala
 50 70 75 80
 52 gac ctg ctc ttc atc agc gct atc cct ctg gtg ctg gcc gtc cgc tgg 343
 53 Asp Leu Leu Phe Ile Ser Ala Ile Pro Leu Val Leu Ala Val Arg Trp
 54 85 90 95 100
 56 act gag gcc tgg ctg ctg ggc ccc gtt gcc tgc cac ctg ctc ttc tac 391
 57 Thr Glu Ala Trp Leu Leu Gly Pro Val Ala Cys His Leu Leu Phe Tyr
 58 105 110 115
 60 gtg atg acc ctg agc ggc agc gtc acc atc ctc acg ctg gcc gcg gtc 439

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61	Val	Met	Thr	Leu	Ser	Gly	Ser	Val	Thr	Ile	Leu	Thr	Leu	Ala	Ala	Val	
62		120							125					130			
64	agc	ctg	gag	cgc	atg	gtg	tgc	atc	gtg	cac	ctg	cag	cgc	ggc	gtg	cgg	487
65	Ser	Leu	Glu	Arg	Met	Val	Cys	Ile	Val	His	Leu	Gln	Arg	Gly	Val	Arg	
66		135							140				145				
68	ggt	cct	ggg	cgg	cgg	gct	gca	gtg	ctg	ctg	gct	atc	tgg	ggc			535
69	Gly	Pro	Gly	Arg	Arg	Ala	Arg	Ala	Val	Leu	Leu	Ala	Leu	Ile	Trp	Gly	
70		150							155			160					
72	tat	tcg	gct	gtc	gcc	gct	ctg	cct	ctc	tgc	gtc	ttc	ttt	cga	gtc	gtc	583
73	Tyr	Ser	Ala	Val	Ala	Ala	Leu	Pro	Leu	Cys	Val	Phe	Phe	Arg	Val	Val	
74	165		170							175			180				
76	ccg	caa	cgg	ctc	ccc	ggc	gcc	gac	cag	gaa	att	tcg	att	tgc	aca	ctg	631
77	Pro	Gln	Arg	Leu	Pro	Gly	Ala	Asp	Gln	Glu	Ile	Ser	Ile	Cys	Thr	Leu	
78		185							190			195					
80	att	tgg	ccc	acc	att	cct	gga	gag	atc	tcg	tgg	gat	gtc	tct	ttt	gtt	679
81	Ile	Trp	Pro	Thr	Ile	Pro	Gly	Glu	Ile	Ser	Trp	Asp	Val	Ser	Phe	Val	
82		200							205			210					
84	act	ttg	aac	ttc	ttg	gtg	cca	gga	ctg	gtc	att	gtg	atc	agt	tac	tcc	727
85	Thr	Leu	Asn	Phe	Leu	Val	Pro	Gly	Leu	Val	Ile	Val	Ile	Ser	Tyr	Ser	
86	215		220							225							
88	aaa	att	tta	cag	atc	aca	aag	gca	tca	agg	aag	agg	ctc	acg	gta	agc	775
89	Lys	Ile	Leu	Gln	Ile	Thr	Lys	Ala	Ser	Arg	Lys	Arg	Leu	Thr	Val	Ser	
90	230		235							240							
92	ctg	gcc	tac	tcg	gag	agc	cac	cag	atc	cgc	gtg	tcc	cag	cag	gac	ttc	823
93	Leu	Ala	Tyr	Ser	Glu	Ser	His	Gln	Ile	Arg	Val	Ser	Gln	Gln	Asp	Phe	
94	245		250							255			260				
96	cg	gg	ctc	tcc	cgc	acc	ctc	tcc	ctc	atg	gtc	tcc	ttc	ttc	atc	atg	871
97	Arg	Leu	Phe	Arg	Thr	Leu	Phe	Leu	Leu	Met	Val	Ser	Phe	Phe	Ile	Met	
98		265							270			275					
100	tgg	agc	ccc	atc	atc	atc	acc	atc	ctc	atc	ctg	atc	cag	aac	ttc		919
101	Trp	Ser	Pro	Ile	Ile	Ile	Thr	Ile	Leu	Leu	Ile	Leu	Ile	Gln	Asn	Phe	
102		280							285			290					
104	aag	caa	gac	ctg	atc	tgg	ccg	tcc	ctc	tcc	ttc	tgg	gtg	gtg	gcc		967
105	Lys	Gln	Asp	Leu	Val	Ile	Trp	Pro	Ser	Leu	Phe	Phe	Trp	Val	Val	Ala	
106	295		300							305							
108	ttc	aca	ttt	gct	aat	tca	gcc	cta	aac	ccc	atc	ctc	tac	aac	atg	aca	1015
109	Phe	Thr	Phe	Ala	Asn	Ser	Ala	Leu	Asn	Pro	Ile	Leu	Tyr	Asn	Met	Thr	
110	310		315							320							
112	ctg	tgc	agg	aat	gag	tgg	aag	aaa	att	ttt	tgc	tgc	ttc	tgg	ttc	cca	1063
113	Leu	Cys	Arg	Asn	Glu	Trp	Lys	Lys	Ile	Phe	Cys	Cys	Phe	Trp	Phe	Pro	
114	325		330							335			340				
116	gaa	aag	gga	gcc	att	tta	aca	gac	aca	tct	gtc	aaa	aga	aat	gac	ttg	1111
117	Glu	Lys	Gly	Ala	Ile	Leu	Thr	Asp	Thr	Ser	Val	Lys	Arg	Asn	Asp	Leu	
118		345							350			355					
120	tcg	att	att	tct	ggc	taa	tttttctta	tagccgagtt	tctcacac	cct							1159
121	Ser	Ile	Ile	Ser	Gly	*											
122		360															
124	ggcgagctgt	ggcatgcttt	taaacagagt	tcatttccag	taccctccat	cagtgcaccc	1219										
125	tgcttaaga	aatgaacct	atgcaaata	tag	acatccac	ag	cgtcggtaaa	ttaagggtg	1279								

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126 atcaccaagt ttcataatat tttccctta taaaaggatt tggccag gtgcagtgg 1339
 127 tcatgcctgt aatcccgca gtttgggagg ctgaggtggg tggatcacct gaggtcagga 1399
 128 gttcgagacc aacctgacca acatggtag accccgtct ctactaaaaaa taaaaaaaaa 1459
 129 aattagctgg gagtgggtgg gggcacctgt aatcttagct acttgggagg ctgaaccagg 1519
 130 agaatctctt gaacctggga ggcagaggtt gcagtgagcc gagatcgtgc cattgcactc 1579
 131 caaccagggc aacaagagtg aaactccatc taaaaaaaaa aaaaaaaaaaag atttgttagt 1639
 132 gttcccttt aaatgtgaac ttttttagtg tggttgtaat atgatcaaat ttaataaata 1699
 133 tttatttatg actgttcagc aaaaaaaaaa aaaaaaaaaagg gcgg 1743
 135 <210> SEQ ID NO: 2
 136 <211> LENGTH: 361
 137 <212> TYPE: PRT
 138 <213> ORGANISM: Homo sapiens
 140 <400> SEQUENCE: 2
 141 Met Ser Pro Glu Cys Ala Arg Ala Ala Gly Asp Ala Pro Leu Arg Ser
 142 1 5 10 15
 143 Leu Glu Gln Ala Asn Arg Thr Arg Phe Pro Phe Phe Ser Asp Val Lys
 144 20 25 30
 145 Gly Asp His Arg Leu Val Leu Ala Ala Val Glu Thr Thr Val Leu Val
 146 35 40 45
 147 Leu Ile Phe Ala Val Ser Leu Leu Gly Asn Val Cys Ala Leu Val Leu
 148 50 55 60
 149 Val Ala Arg Arg Arg Arg Gly Ala Thr Ala Cys Leu Val Leu Asn
 150 65 70 75 80
 151 Leu Phe Cys Ala Asp Leu Leu Phe Ile Ser Ala Ile Pro Leu Val Leu
 152 85 90 95
 153 Ala Val Arg Trp Thr Glu Ala Trp Leu Leu Gly Pro Val Ala Cys His
 154 100 105 110
 155 Leu Leu Phe Tyr Val Met Thr Leu Ser Gly Ser Val Thr Ile Leu Thr
 156 115 120 125
 157 Leu Ala Ala Val Ser Leu Glu Arg Met Val Cys Ile Val His Leu Gln
 158 130 135 140
 159 Arg Gly Val Arg Gly Pro Gly Arg Arg Ala Arg Ala Val Leu Leu Ala
 160 145 150 155 160
 161 Leu Ile Trp Gly Tyr Ser Ala Val Ala Leu Pro Leu Cys Val Phe
 162 165 170 175
 163 Phe Arg Val Val Pro Gln Arg Leu Pro Gly Ala Asp Gln Glu Ile Ser
 164 180 185 190
 165 Ile Cys Thr Leu Ile Trp Pro Thr Ile Pro Gly Glu Ile Ser Trp Asp
 166 195 200 205
 167 Val Ser Phe Val Thr Leu Asn Phe Leu Val Pro Gly Leu Val Ile Val
 168 210 215 220
 169 Ile Ser Tyr Ser Lys Ile Leu Gln Ile Thr Lys Ala Ser Arg Lys Arg
 170 225 230 235 240
 171 Leu Thr Val Ser Leu Ala Tyr Ser Glu Ser His Gln Ile Arg Val Ser
 172 245 250 255
 173 Gln Gln Asp Phe Arg Leu Phe Arg Thr Leu Phe Leu Leu Met Val Ser
 174 260 265 270
 175 Phe Phe Ile Met Trp Ser Pro Ile Ile Thr Ile Leu Leu Ile Leu
 176 275 280 285

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177 Ile Gln Asn Phe Lys Gln Asp Leu Val Ile Trp Pro Ser Leu Phe Phe
178 290 295 300
179 Trp Val Val Ala Phe Thr Phe Ala Asn Ser Ala Leu Asn Pro Ile Leu
180 305 310 315 320
181 Tyr Asn Met Thr Leu Cys Arg Asn Glu Trp Lys Lys Ile Phe Cys Cys
182 325 330 335
183 Phe Trp Phe Pro Glu Lys Gly Ala Ile Leu Thr Asp Thr Ser Val Lys
184 340 345 350
185 Arg Asn Asp Leu Ser Ile Ile Ser Gly
186 355 360
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190 <211> LENGTH: 1086
191 <212> TYPE: DNA
192 <213> ORGANISM: Homo sapiens
194 <400> SEQUENCE: 3
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196 aaccgcaccc gctttccctt cttctccgac gtcaaggcg accaccggct ggtgctggcc 120
197 gcggtggaga caaccgtgt ggtgtcatac tttgcagtgt cgctgctggg caacgtgtgc 180
198 gcccgtgtgc tgggtgcgcg ccgacgcacgc cgccgcgcgat ctgcctgcct ggtactcaac 240
199 ctcttctgcg cggacctgtc cttcatcagc gctatccctc tgggtgcgtgc cgtgcgtgg 300
200 actgaggcct ggctgctggg ccccggttgc tgccacctgc tcttctacgt gatgaccctg 360
201 ageggcagcg tcaccatcct caccgtggcc ggggtcagcc tggagcgcatt ggtgtgcattc 420
202 gtgcacactgc agcgcggcgt ggggggtctt gggccgggg cgccggcagt gctgctggcg 480
203 ctcatctggg gctattcggc ggtcgccgt ctgcctctt gctgttttt tcgagtcgtc 540
204 ccgcacacgc tccccggcgc cgaccaggaa atttcgattt gcacactgtat ttggcccacc 600
205 attcctggag agatctcggt ggatgtctt tttgttactt tgaacttctt ggtgccagga 660
206 ctggtcattt tgatcagttt ctccaaaattt ttacagatca caaaggcatc aaggaagagg 720
207 ctcacggtaa gcctggccta ctcggagagc caccagatcc gctgtccca gcaggacttc 780
208 cggctcttcc gcaccctt ctccttcattt gtctccttct tcattatgtt gagccccatc 840
209 atcatcacca tcctccatcat cctgatccag aacttcaagc aagacctggg catctggcg 900
210 tccctttctt tctgggtgtt ggccttcaca tttgttaattt cagccctaaa cccatccctc 960
211 tacaacatga cactgtgcag gaatgagtgg aagaaaattt tttgtgtttt ctggccca 1020
212 gaaaaggag ccatttaac agacacatct gtcaaaaagaa atgacttgc gattatttct 1080
213 ggctaa 1086
215 <210> SEQ ID NO: 4
216 <211> LENGTH: 1560
217 <212> TYPE: DNA
218 <213> ORGANISM: Murine ortholog
220 <220> FEATURE:
221 <221> NAME/KEY: CDS
222 <222> LOCATION: (195)...(1280)
224 <400> SEQUENCE: 4
225 ttgccaagct cagcgttaagc ctcttccact gcaatctcac agaaggggtt catggagtgc 60
226 ttcacaccat cagtgaccac tccagacttg tccggcttta cccgaatctt cacagcggag 120
227 tcatgtaccc tcttgacaggc caccggcgcc cgccagctccg ccatcttccc ggacgcgtgg 180
228 gccggcgcc cgcc atg tcc cct gag tgt gca cag acg acg ggc cct ggt 230
229 Met Ser Pro Glu Cys Ala Gln Thr Thr Gly Pro Gly
230 1 5 10
232 ccc tcg cac acc ctg gac caa gtc aat cgc acc cac ttc cct ttc ttc 278

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233	Pro	Ser	His	Thr	Leu	Asp	Gln	Val	Asn	Arg	Thr	His	Phe	Pro	Phe	Phe	
234	15				20						25						
236	tgc	gat	gtc	aag	ggc	gac	cac	cg	ttg	gtg	ttg	agc	gtc	gtg	gag	acc	326
237	Ser	Asp	Val	Lys	Gly	Asp	His	Arg	Leu	Val	Leu	Ser	Val	Val	Glu	Thr	
238	30				35						40						
240	acc	gtt	ctg	gga	ctc	atc	ttt	gtc	gtc	tca	ctg	ctg	ggc	aac	gtg	tgt	374
241	Thr	Val	Leu	Gly	Leu	Ile	Phe	Val	Val	Ser	Leu	Leu	Gly	Asn	Val	Cys	
242	45				50						55					60	
244	gct	cta	gtg	ctg	gtg	g	gc	cg	cg	cg	cg	gt	gg	gc	tca	gcc	422
245	Ala	Leu	Val	Leu	Ala	Arg	Arg	Arg	Arg	Arg	Arg	Gly	Ala	Ser	Ala	Ser	
246	65				70						75						
248	ctg	gtg	ctc	aa	ctc	ttc	tg	gc	gat	ttg	ctc	ttc	acc	agc	gcc	atc	470
249	Leu	Val	Leu	Asn	Leu	Phe	Cys	Ala	Asp	Leu	Leu	Phe	Thr	Ser	Ala	Ile	
250	80				85.						90						
252	cct	cta	gtg	ctc	gtg	cg	tc	tg	act	gag	ggc	tgg	ctg	ttg	ggg	ccc	518
253	Pro	Leu	Val	Leu	Val	Val	Arg	Trp	Thr	Glu	Ala	Trp	Leu	Leu	Gly	Pro	
254	95				100						105						
256	gtc	gtc	tgc	cac	ctg	ctc	ttc	tac	gtg	atg	aca	atg	agc	ggc	agc	gtc	566
257	Val	Val	Cys	His	Leu	Leu	Phe	Tyr	Val	Met	Thr	Met	Ser	Gly	Ser	Val	
258	110				115						120						
260	acg	atc	ctc	aca	ctg	ggc	g	gtc	agc	ctg	gag	cg	atg	gtg	tgc	atc	614
261	Thr	Ile	Leu	Thr	Leu	Ala	Ala	Val	Ser	Leu	Glu	Arg	Met	Val	Cys	Ile	
262	125				130						135					140	
264	gtg	cgc	ctc	cg	ggc	ttg	agc	ggc	ccg	gg	cg	cg	act	cag	gc	662	
265	Val	Arg	Leu	Arg	Arg	Gly	Leu	Ser	Gly	Pro	Gly	Arg	Arg	Thr	Gln	Ala	
266	145				150						155						
268	gca	ctg	ctg	g	ct	ttc	at	tgg	gg	tac	tc	gc	ggc	ctg	ccc	710	
269	Ala	Leu	Leu	Ala	Phe	Ile	Trp	Gly	Tyr	Ser	Ala	Leu	Ala	Leu	Pro		
270	160				165						170						
272	ctc	tac	atc	ttg	ttc	cg	gt	tc	cc	cg	ttt	ccc	ggc	gg	gac	758	
273	Leu	Tyr	Ile	Leu	Phe	Arg	Val	Val	Pro	Gln	Arg	Leu	Pro	Gly	Gly	Asp	
274	175				180						185						
276	cag	gaa	att	ccg	att	tgc	aca	ttg	gat	tgg	ccc	aa	cg	ata	gga	gaa	806
277	Gln	Glu	Ile	Pro	Ile	Cys	Thr	Leu	Asp	Trp	Pro	Asn	Arg	Ile	Gly	Glu	
278	190				195						200						
280	atc	tca	tgg	gat	gt	ttt	ttt	gag	act	ttg	aa	t	tc	gt	cc	gg	854
281	Ile	Ser	Trp	Asp	Val	Phe	Phe	Glu	Thr	Leu	Asn	Phe	Leu	Val	Pro	Gly	
282	205				210						215					220	
284	ctg	gtc	att	gt	atc	ag	tac	tcc	aaa	att	tta	ca	atc	ac	aaa	gca	902
285	Leu	Val	Ile	Val	Ile	Ser	Tyr	Ser	Lys	Ile	Leu	Gln	Ile	Thr	Lys	Ala	
286	225				230						235						
288	tcg	cg	aag	agg	ctt	ac	tg	agc	ttg	gca	tac	tct	gag	agc	cac	cag	950
289	Ser	Arg	Lys	Arg	Leu	Thr	Leu	Ser	Leu	Ala	Tyr	Ser	Glu	Ser	His	Gln	
290	240				245						250						
292	atc	cga	gt	tc	caa	caa	gac	tac	cga	ctc	ttc	cg	ac	ctc	ttc	gt	998
293	Ile	Arg	Val	Ser	Gln	Gln	Asp	Tyr	Arg	Leu	Phe	Arg	Thr	Leu	Phe	Leu	
294	255				260						265						
296	ctc	atg	gtt	tcc	ttc	ttc	atc	atg	tgg	agt	ccc	atc	atc	atc	acc	atc	1046
297	Leu	Met	Val	Ser	Phe	Phe	Ile	Met	Trp	Ser	Pro	Ile	Ile	Thr	Ile		

VERIFICATION SUMMARY
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L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date